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Under the Peperwork Raduction Act of 1995, no persons are regulated to respond to a collection of information unless it contains a valid OA/B control number. Substitute for form 1449A/PTO Complete if Known INFORMATION DISCLOSURE 10/774,956 **Application Number** STATEMENT BY APPLICANT February 9, 2004 Filing Date Gardner, Donald **First Named Inventor** 2813 **Group Art Unit** Berezny, Nema **Examiner Name** Attorney Docket No: 884.140US3 Sheet 1 of 4

		US PA	ATENT DOCUMENTS	•
Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
70/1	US-3,607,462	09/21/1971	Laing, Alfred M.	03/21/1968
	US-3,905,883	09/16/1975	Hanazono, Masanobu, et al.	06/18/1974
	US-4,543,553	09/24/1985	Mandai, H., et al.	05/16/1984
	US-4,791,719	12/20/1988	Kobayashi, Tetsuo , et al.	01/08/1987
	US-4,797,648	01/10/1989	Kaneko, Toshimi , et al.	03/09/1988
	US-4,816,784	03/28/1989	Rabjohn, Gordon G.	01/19/1988
	US-5,047,296	09/10/1991	Miltenberger, Bernard, et al.	09/08/1988
	US-5,121,852	06/16/1992	Wilkes, Robert D.	08/08/1991
	US-5,221,459	06/22/1993	Okano, Yoko, et al.	04/24/1992
	US-5,420,558	05/30/1995	Ito, Naoki , et al.	05/26/1993
	US-5,469,399	11/21/1995	Sato, Toshiro, et al.	03/15/1994
	US-5,530,415	06/25/1996	Takaya, Minoru	03/07/1994
· -	US-5,583,474	12/10/1996	Mizoguchi, Tetsuhiko , et al.	05/25/1994
-	US-5,609,946	03/11/1997	Korman, Charles S., et al.	10/03/1995
	US-5,694,030	12/02/1997	Sato, Toshiro , et al.	09/16/1996
	US-5,705,287	01/06/1998	Doerner, Mary F., et al.	09/20/1994
	US-5,793,272	08/11/1998	Burghartz, J. N., et al.	08/23/1996
	US-5,834,825	11/10/1998	Imai, Kiyotaka	12/23/1996
	US-5,892,425	04/06/1999	Kuhn, W. B., et al.	04/10/1997
	US-5,961,746	10/05/1999	Nepela, Daniel A.	08/15/1997
	US-5,976,715	11/02/1999	Chen, Li-Han, et al.	11/06/1997
	US-6,031,445	02/29/2000	Marty, Michel, et al.	11/25/1998
	US-6,033,782	03/07/2000	Hubbard, Ronald N., et al.	05/21/1997
	US-6,067,002	05/23/2000	Fujino, Masato , et al.	09/11/1996
 	US-6,103,136	08/15/2000	Han, Cherng-Chyi	03/23/1998
	US-6,121,852	09/19/2000	Mizoguchi, Tetsuhiko , et al.	07/14/1998
	US-6,166,422	12/26/2000	Qian, Linggian , et al.	05/13/1998
 	US-6,191,495	02/20/2001	Kossives, Dean P., et al.	04/16/1999
	US-6,207,303	03/27/2001	Tomita, Hiroshi	06/02/1998
 -	US-6,404,317	06/11/2002	Misoguchi, Tetsuhiko , et al.	08/23/1996
 	US-6,441,715	08/27/2002	Johnson, F. S.	02/16/2000
TN	US-6,452,243	09/17/2002	Hatano, Keisuke , et al.	12/20/1999

		FOREIGN PATEN		
Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	T ²
TN	DE-4117878A1 (w/ English Abstract)	12/12/1991	Hasegawa, M , et al.	
TN,	EP-0295028A1	12/14/1988	Pettigrew, Robert M., et al.	
77	EP-0884783A2	12/16/1998	Kossives, Dean P., et al.	

EXAMINER	T. NEWLEN	DATE CONSIDERED 142/05

PTO/S8/08A(10-01)
Approved for use through 10/31/2002, OAMS 651-0031
US Patent & Trademark Office U.S. OF PARTMENT OF COMMERCE
spond to a collection of information unless of contribute a united Contribution.

Substitute for form 1449A/PTO	Complete If Known	Under the Peperwork Reduction Act of 1996, no parators are required to respond to a collection of information unless if contains a valid OMS control number. Complete If Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Application Number	10/774,956		
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	First Named Inventor	Gardner, Donald		
	Group Art Unit	2813		
	Examiner Name	Berezny, Nema		
Sheet 2 of 4	Attorney Docket No: 8	884.140US3		

		FOREIGN PATEN	IT DOCUMENTS	
Examiner initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	T ²
TN	JP-06124843 (w/ English Abstract)	05/06/1994	Mino, Masato, et al.	
TN	JP-61020311 (w/ English Abstract)	01/29/1986	Tago, Akio , et al.	
71	WO-0139220A1	05/31/2001	Gardner, Donald	

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	OTHE	R DOCUMENTS NON PATENT LITERATURE DOCUMENTS	,
Examiner initials*	Cite No 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	1,2
/		"Magnetic Devices Research",(various articles) http://mems.mirc.gatech.edu/	
1//		research/magnetic.html, 10 pgs.	
		BABA, M., et al., "GHz-drive Magnetic Thin-Film Inductor Using CoNbZr film", Journal of the Magnetics Society of Japan, 24(4-2), (2000), 879-882	
	×	BRANDON, E., et al., "Microinductors for spacecraft power electronics",	
		Magnetic Materials, Processes and Device VI Applications to Storage and	
		Microelectromechanical systems (MEMS), Vol. 2000-29, The Electrochemical	
		Society, Inc., Pennington, New Jersey, (2001), 559-567	
		BRANDON, E., et al., "Passive Components for Systems-on-a-Chip	
		Applications", International Conference on Integrated Micro Nanotechnology for	
		Space Applications, Center for Integrated Space Microsystems, Jet Propulsion	
		Laboratory, (April 11-15, 1999), 3 pgs.	
		BRANDON, E., "System on a Chip Integrated Passive Components (µIRS)",	
		2 pgs.	
		BURGHARTZ, J., "Integrated Multilayer RF Passives in Silicon Technology",	
		1998 Topical Meeting on Silicon Monolithic Integrated Circuits in RF Systems,	
{ }		Digest of Papers, (Sept. 17-18, 1998), 141-147	
		BURGHARTZ, J. N., "Progress in RF Inductors on Silicon-Understanding	
		substrate Losses", Techn. Dig. IEDM, (1998), 523-526	1
		FESSANT, A., et al., "Influence of In-Plane Anisotropy and Eddy Currents on	
\		the Frequency Spectra of the Complex Permeability of Amorphous CoZr Thin	
		Films", IEEE Transactions on Magnetics, 29(1), (January 1993), 82-87	
		GARDNER, D., et al., "High Frequency (GHz) and Low Resistance Integrated	
\		Inductors Using Magnetic Materials", Proc. IEEE Int. Interconnect Technol.	
		Conf., (June 2001), 101-103	
		GARDNER, D., et al., "Mechanical Stress as a Function of Temperature for	
		Aluminum Alloy Films", <u>Journal of Applied Physics</u> , 67(4), (February 15,	
		1990),1831-1845	<u> </u>
		KOBAYASHI, Y., et al., "New Type Micro Cloth-inductor and Transformer With	
_/./		Thin Amorphous Wires and Multi-Thin Coils", IEEE Transactions on Magnetics,	
//~ V		28(5), (September 1992), 3012-3014	
1			<u></u>

EXAMINER	T. NEWSEN_	DATE CONSIDERED 12/2/05

PTO/SB/084(10-01)
Approved for use through 10/31/2002, OMB 651-0011
US Patent & Trademic Office: U.S. DEPARTMENT OF COMMERCE
on of information unless it contains a valid OMB control number,

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Application Number	10/774,956
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	Group Art Unit	2813
	Examiner Name	Berezny, Nema
Sheet 3 of 4	Attorney Docket No: 8	384.140US3

	OTHER	R DOCUMENTS NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No ¹	include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
72/		KORENIVSKI, V., et al., "Magnetic Film Inductors for Radio Frequency Applications", <u>Journal of Applied Physics</u> , 82(10), (November 15, 1997), 5247-5254	
		LONG, J., et al., "The Modeling, Characterization, and Design of Monolithic Inductors for Silicon RF IC's", <u>IEEE Journal of Solid-State Circuits</u> , 32(2), (March 1997), 357-369	
		MATSUKI, H., et al., "A New Cloth Inductor Using Amorphous Fiber", <u>IEEE</u> Transactions on Magnetics, 21(5), (September 1985), 1738-1740	
		MOHAN, S., et al., "Bandwidth Extension in CMOS With Optimized On-Chip Inductors", IEEE Journal of Solid-State Circuits, 35(3), (March 2000), 346-355	
		MOHAN, S., et al., "Modeling and Characterization of On-Chip Transformers", 1998 International Electron Devices Meeting Technical Digest, Center for Integrated Systems, Stanford University, Stanford, CA,(Dec. 1998), 531-534	
		MOHAN, S., et al., "Simple Accurate Expressions for Planar Spiral Inductances", IEEE Journal of Solid-State Circuits, 34(10), (October 1999), 1419-1424	
		MOJARRADI, M., et al., "Power Management and Distribution for System on a Chip for Space Applications", AIAA Conference, Paper No. 284, (1999), 8 pgs.	
		NIKNEJAD, A., et al., "Analysis, Design, and Optimization of Spiral Inductors and Transformers Si RF IC's", IEEE Journal of Solid-State Circuits, 33(10), (October 1998),1470-1481	_
		O'DONNELL, T., et al., "Microtransformers and Inductors using Permalloy Thin Films", Preparation, Properties, and Applications of Thin Ferromagnetic Films, http://www.iemw.tuwien.ac.at/publication/workshop0600/ODonnell.html, (June 2000), 45-52	
		PARK, J., et al., "Batch-fabricated microinductors with electroplated magnetically anisotropic and laminated alloy cores", <u>IEEE Transactions on Magnetics</u> , 35(5), (September 1999), 4291-4300	
		SATO, T., et al., "New Applications of Nanocrystalline Fe(Co-Fe)-Hf-O Magnetic Films to Micromagnetic Devices", <u>Journal of Applied Physics</u> , 83(11), (June 1, 1998), 6658-6660	
		TOMITA, H., et al., "Oblique-Field Annealing Effect for In-Plane Magnetic Anisotropy of Soft Magnetic Co-Nb-Zr Thin Films", <u>IEEE Transactions on Magnetics</u> , 30(3), (May 1994), 1336-1339	
		YABUKAMI, S., et al., "Noise Analysis of a MHz-3 GHz Magnetic Thin Film Permeance Meter", <u>Journal of Applied Physics</u> , 85(8), (April 15, 1999), 5148-5150	
The		YAMAGUCHI, M., et al., "1 GHz-Drive Magnetic Thin-Film Inductors for RF Integrated Circuits Using Micro-Patterned Granular Film", <u>Digest of INTERMAG 99, 1999 IEEE International Magnetics Conference, 1999</u> , (May 18-21, 1999), ED01, 1 pg.	

	- 1/11/2		
EXAMINER	T. NEWEN	DATE CONSIDERED	12/2/05
	1 010 10		

PTO/SB/06A(10-01)
Approved for use through 10/31/2002, OMB 851-0031
US Pleast 6 Trickment Office U.S. DEPARTMENT OF COMMERCE

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Application Number	10/774,956	
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Sheet 4 of 4	Attorney Docket No: 8	884.140US3	

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·	OTHE	R DOCUMENTS NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
		YAMAGUCHI, M., et al., "Magnetic Films for Planar Inductive Components and	
/		Devices", Handbook of Thin Film Devices, edited by M.H. Francombe, Vol. 4.	
$7\lambda_{\rm H}$		Magnetic Thin Film Devices, (2000),185-212	
7		YAMAGUCHI, M., et al., "Magnetic Thin-Film Inductor for RF Integrated	
		Circuits", Extended Abstracts of the 1999 International Conference on Solid-	
- 11		State Devices and Materials, Tokyo, (1999), 580-581	
		YAMAGUCHI, M., et al., "Microfabrication and Characteristics of Magnetic Thin-	
1 1		Film Inductors in the Ultra High Frequency Region", Journal of Applied Physics.	
		85(11), (June 1, 1999), 7919-1922	
/\/		YUE, C., et al., "On-Chip Spiral Inductors With Patterned Ground Shields for Si-	
77/1		Based RF ICs", IEEE Jorunal of Solid-State Circuits, 33(5), (May 1998), 743-752	

EXAMINER T. NEWSTEN DATE CONSIDERED 12/2/05